



EA Engineering, Science, and Technology, Inc.

3468 Mt. Diablo Blvd. B-100 Lafayette, CA 94549 Telephone: (510) 283-7077 Facsimile: (510) 283-3894

3 March 1997

Loren Bottorff Senior Water Resources Engineer CALFED Bay-Delta Program 1416 Ninth St. Suite 1155 Sacramento. CA 95814

RE: Technical review of Ecosystem Restoration Program Plan

Volume 1: Ecological Zone Visions

Volume II: Resources Visions

Appendix 9
Appendix 12

TECHNICAL CONTENT: These documents are an excellent synthesis and compendium of accumulated knowledge of the CALFED ecological zones and biological resources. Though there are many small deficiencies and corrections that need to be dealt with systematically by a skilled editor, the volumes can stand on their own as the reference point for community "buy-in" on the objectives, targets, and numerous things that need to be done to achieve them.

OBJECTIVE: Will the objectives for producing the CALFED visions documents be met by producing two such lengthy and repetitive documents? If the objective, "introduce and initiate ERPP, initiate comments and feedback, intensify stakeholder involvement and provide guidance for the program" are to be met, I believe that documents that can be consumed in two to three hours with numerous technical appendixes are preferable to documents that take 20 to 30 hours to consume.

FORMAT: People with a strong sense of aesthetic style need to be brought in earlier in the process of formatting these kinds of documents. For example, a section heading, "CALFED Ecosystem Restoration Program Plan Implementation Objectives, Targets, and Programmatic Actions" in a two column format does not work. A two column format requires much shorter heading. Though both systems have merit, I tend to prefer the single column format for this type of document. A twenty page, full color document might be better in two columns. The format and style issues are too numerous to go into in this communication.

EDITS: I made marks throughout the text as I noted problems. A good editor will find many more and clean them up easily.

INSERTED FIGURES: The numerous small inserted figures scattered throughout the text are very beneficial. Authors need to make very sure that the associated text says the same thing that the figures and tables say. There are quite a few cases where the information in the text and the figures and tables do not conform.

RATING TABLES: The basis for the ratings needs to be spelled out rather explicitly at the beginning or dropped. It seems far too arbitrary. Was it done by committee, by a standard ecological indexing system, by different people in different watersheds? How does it work politically to call one place or situation a 'D' and another place or situation a 'B'. Is this the document that you want to put your grading system into at this time? How do grades and visions go together? Poorly, I think.

RATIONALE SECTIONS: Rationale sections are scattered somewhat at random throughout volume 1. Most of them are very well written, but by in large the information seems out of place, and repetitive of what was said in an earlier section. In general I think that they would be better placed in the supporting information or introduction sections of each chapter and not put in italics.

TOXICITY: Improved water quality was generally underemphasized as a goal. The toxic effects of heavy metals was not adequately addressed. The impacts from nitrates, phosphates and pesticides from agricultural runoff were hardly addressed at all. Meeting streamflow and gravel recruitment objectives will not improve survival if the water is getting increasingly toxic.

REFERENCES: I do not think that this type of document needs the same type of reference citation systems as a refereed journal. There should be an early statement about the primary sources of information used at the beginning of each section and then almost no others. This will help the reader that does want more information but not slow down the reading. If references are to be used, then they should be used exhaustively as they are in some sections.

SPRING-RUN: Some consideration of the implications of the recent legal ruling on the status of spring-run chinook salmon is needed in these documents.

STRIPED BASS: It is not clear if the author of this section is informed of the work of Kimmerer and others on the factors affecting striped bass population dynamics.

DELTA SMELT: That is not a picture of a delta smelt!

SYNTHESIS: There is a need for a concluding chapter that brings together the visions number, cfs flow increases, number of screens needed, tons of gravel that need to be dumped, the number of miles of fencing, etc. Though the numbers may be a bit speculative at this point, summing them all up will give a better picture of the order of

magnitude of the job ahead and the human and financial resources that will be needed to achieve the targets.

Thank you for the opportunity to review these documents. If I can be of any additional service, please do not hesitate to contact me at (510) 283-7077 or Scott Wilcox at (916) 924-7450.

Sincerely,

Robert R. Abbott, Ph.D.

Sr. Scientist